NOTES ON SOME CRYPTOPHAGIDAE (COLEOPTERA) OCCURRING AT LOCH GARTEN, INVERNESS-SHIRE

By J. A. OWEN*

The pinewoods of the R.S.P.B. Loch Garten Reserve form part of Abernethy Forest — a major native pinewood area. In studying the beetles of the Reserve over the past 7 years, I have come across some members of the family Cryptophagidae which are sufficiently uncommon in Britain to justify brief notes.

Cryptophagus angustus Ganglbauer. A specimen was beaten from a withered pine branch lying on the ground in July 1985.

This species was added to the British list by Messrs. Coombes and G. Woodroffe (1955 Trans. R. Ent. Soc. Lond. 106, 237) who found, in their extensive study of the genus, that all the British specimens they could examine labelled cylindrus Kiesw. were, in fact, angustus. This beetle is associated with coniferous trees and, in Britain, is widespread though uncommon.

Cryptophagus badius Sturm. This species has turned up more frequently on the Reserve than any other member of the genus. About 30 specimens have been found in various situations. Most have occurred in disused red squirrels' dreys and in old nests of various birds (e.g. osprey, owl, carrion crow). Others have been caught in a Malaise trap set among old pines and in funnels set out to monitor the fall of pine seed.

Messrs. Coombes and Woodroofe (*l.c.*) reported that the only authentic British examples of the species which they could detect were taken by the late Mr. P. Harwood from a squirrel's drey at Aviemore. There are, however, specimens in the Harwood collection taken at various other sites on Speyside between 1924 and 1942. (see Welch, R. C. 1979 *Entomologist's mon. Mag.* 115, 240). My friend Mr. A. A. Allen has in his collection two specimens taken by Mr. Harwood labelled respectively "Boat of Garten 7.ix.24? squirrel's drey" and "Nethy Bridge 24.viii.30" and one taken by Dr. A. M. Easton from a drey in Rothiemurchus Forest on 27.ix.68. It is possible that the first of these came from the Reserve which is less than 1 km from Boat of Garten at the nearest point. The beetle was found in 1966 in a sparrowhawk's nest at Polchar which is about 3km from Aviemore (Welch, *l.c.*). Thus all the authenticated British records of this species have been for a few sq. km.

Cryptophagus lapponicus Gyllenhal. Seven specimens were found in a forsaken squirrel's drey in a Scot's pine together with specimens of C. badius and C. scanicus L. The nest contained a mummified half grown squirrel with which some of the beetles were

^{*8} Kingsdown Road, Espsom, Surrey, KT17 3PU.

closely associated. A further two specimens occurred in each of two other dreys collected in September 1985.

The first authentic records of this species in Britain were reported by Messrs. Coombes and Woodroffe (l.c.) who found specimens taken at Aviemore in the Champion and Harwood collections, mostly from squirrels' dreys. Mr. Allen has 4 examples taken by Mr. Harwood, 3 labelled "Boat of Garten 1.ix.34" and one from Aviemore. It was also found in a sparrowhawk's nest at Polchar in 1966 (Welch l.c.). Thus, as with C. badius, all authenticated records of this species in Britain have occurred within a few sq. km.

Cryptophagus subdepressus Gyllenhal. About a dozen specimens were beaten from the lower branches of old spruce trees in October 1984 and one was caught in a Malaise trap set among old pines.

The species was recorded from Loch Garten and elsewhere on Speyside in 1910 by Hudson Beare (Entomologist's Mon. Mag. 44, 272), a year after its presence in Britain was first noted (Joy, N. H. 1907 Entomologist's mon. Mag. 43, 225).

Most of the records for this species in Britain (e.g. Champion, G. C. 1908 Entomologist's mon. Mag. 43, 250) have mentioned an association with spruce which is a tree re-introduced to Britain relatively recently. Dr. Joy (l.c.) recorded that he obtained his first specimens from "young fir trees" though he later (Joy, N. H. 1907 Entomologist's mon. Mag. 43, 275) reported finding examples on "Scotch firs". Hudson-Beare reported that he was quite unable to find the species on "Scotch firs" (which he distinguishes from "spruce firs") and I have beaten innumerable branches of Scots pine on the Reserve without finding it. It could be that the beetle does not occur in areas where there is only Scots pine and only became established in Britain after spruce was introduced. Alternatively, it may survive in forests which are exclusively of Scots pine but still prefer spruce when it is available.

Henoticus serratus (Gyll.) An example of this beetle was attracted to some fermenting fruit residues set out among old pine trees (Pinus sylvestris L.) as a trap for beetles in late summer 1983.

Though it is widely distributed in Britain the species is generally rare, especially in Scotland. There are old records for Rannoch (Fowler, W. W. 1889 Coleoptera of the British Isles Vol. 3), Aviemore (Champion, G. C. 1887-8 Entomologist's Mon. Mag. 14, 93) and Arrochar (Bagnall, R. S. 1907 Entomologist's mon. Mag. 43, 234). There is a more recent unpublished record (Welch, R. C. pers. comm.) for Rothiemurchus Forest.

This species is usually found under bark or at blossom. At Loch Garten 35 beetle species have occurred at fermenting fruit traps, of which most, e.g. *Epuraea* spp, *Rhizophagus* spp., are usually found in sappy conditions under bark.

Caenoscellis ferruginea (Sahl.). An example appeared in a

heap of fungi set up to attract beetles in an old pinewood area in July 1979.

This species is widely distributed in Britain but there are few records for Scotland.

Atomaria (Anchicera) contaminata Erichson. Extensive pit-fall trapping in various parts of the Reserve produced a specimen from an area among old pines. About a dozen other examples were found in the summer of 1985 in the same and in another part of the Reserve by careful examination of debris (mostly mouldy pine needles) beneath withered pine branches which had been lying on the ground for about 2 years.

The existance of this species in Britain was first detected by Mr. C. Johnson (1975 Entomologist's mon. Mag. 111, 177) who recognised as such an example taken Dr. R. A. Crowson near Stirling in 1966. I have not found any other British records.

Atomaria bella Reitter. Nine specimens of this species have been taken. Four occurred in the same habitat as A. contaminata and the remainder were caught at various times in a Malaise trap set among old pines.

The presence of this species in Britain was first detected by Mr. C. Johnson (1967 Entomologist 100, 39) who identified as such a specimen taken by Mr. A. A. Allen in July 1938 under larch bark at Grantown-on-Spey and two other specimens taken by Mr. P. Harwood at Aviemore in September 1942. There are two specimens in the British Museum (Natural History) from the Sharp collection—one labelled "Forres 24.vi.1910" and the other without data.

Atomaria pulchra Erichson. About 20 examples of this species were caught at various time in a Malaise trap set among old pines.

This is the species known earlier in Britain (erroneously) as affinis, badia or prolixa. Unlike the other Atomaria species dealt with it is widely distributed though uncommon and is associated with deciduous and coniferous trees (see Johnson, C. 1967 l.c.).

Atomaria sahlbergi Sjoberg. A specimen of this species was found in July 1978 under loose bark of a standing dead pine tree and four other examples were caught in May 1984 in a Malaise trap set among old pines.

This is another species whose presence in Britain was established by Mr. C. Johnson (1967 *l.c.*), on the basis of 3 specimens collected by Mr. P. Harwood in Aviemore in 1934 (1) and 1942 (2). Two of the three specimens were found in wasps' nests but examination of this habitat on the Reserve has failed to produce the species. There are two specimens in the British Museum (Natural History) — one from the Sharp collection labelled "Nethy Bridge July 1903" and the other collected by Champion labelled "Aviemore" without date.

Other species of Cryptophagidae which I have found at Loch

Garten but which do not warrant special comment are:— Cryptophagus dentatus (Herbst); C. distinguendus Sturm; C. pubescens Sturm; C. scanicus (L.); C. scutellatus Newm.; C. setulosus Sturm; Antherophagus nigricornis (F.); A. pallens (L.); Atomaria (Anchicera) apicalis Erichson; A. atricapilla Stephens; A. berolinensis Kraatz; A. fuscipes (Gyll.); A. lewisi Reitier; A. nitidula (Marsh.) and A. ruficornis Marsh.

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Note added at proof stage: in a recent paper (Johnson, C., 1986, New synonymy and changes in the nomenclature of European Cryptophagidae (Coleoptera) *Entomologist's Gaz.* 37. 129-132) the following changes are made: *Atomaria badia* Erichson (= sahlbergi Sjoberg) and *Atomaria ornata* Heer (=contaminata Erichson).

A FEW LATE DATES FOR COLEOPTERA IN 1985. — Single specimens of the following beetles were noted last year in or about the woods at Shooters Hill, S. E. London, on dates quite exceptionally late for the species concerned:— Ischnoglossa prolixa Grav. (a spring and early summer species), swept 18.viii; Agriotes pallidulus Ill., ditto; Malthinus flaveolus Hbst., ditto; Cryptocephalus pusillus F., off oak 9.ix; Anaspis lurida Steph., males 19.viii, 9.ix, 30.ix. — the last date especially remarkable in extending the adult span of the species to fully four months, otherwise unexampled in an Anaspis. The season was peculiar in some respects, but even a retarded beginning would scarcely account for cases such as the above. One may be added from 1984, when as late as 11th November a Curculio glandium Marsh. was seen slowly ascending an oak trunk; the weather at the time was mild and a number of insects still active. — A. A. ALLEN.